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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/814,744	03/31/2004	Kimito Terai	36616	7222

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EXAMINER

LE, LANA N

ART UNIT PAPER NUMBER

2618

DATE MAILED: 07/13/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary****Application No.**

10/814,744

**Applicant(s)**

TERAI ET AL.

**Examiner**

Lana N. Le

**Art Unit**

2618

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 31 March 2004.  
2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-5 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 1,5 is/are rejected.  
7) ☒ Claim(s) 2-4 is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.  
10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_.  
5) ☐ Notice of Informal Patent Application (PTO-152)  
6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Mogi (US 5,303,400).

Regarding claim 1, Mogi discloses a broadcast wave receiving apparatus (fig. 2), comprising:

first and second tuning circuits (TUN1, TUN2) each having a resonance frequency (A,B,C,D...H);

first controlling means (CPU 36) for controlling one of said first and second tuning circuits (one of TUN1, TUN2) to ensure that said resonance frequency (A,B,C,D...H) of one of said first and second tuning circuits is tuned to a specific frequency before allowing one of said first and second tuning circuits to detect a broadcast wave at said specific frequency (col 4, line 50 – col 5, line 7);

judging means for judging whether or not to receive said broadcast wave detected by one of said first and second tuning circuits (TUN1, TUN2) on the basis of predetermined threshold information (SL) on said broadcast waves (col 2, line 61 - col 3, line 5; col 5, lines 8-18); and

second controlling means (CPU 36) for controlling (via control signal CTL) the other of said first and second tuning circuits to ensure that said resonance frequency of the other (TUN2) of said first and second tuning circuits (TUN1, TUN2) is tuned to said specific frequency before allowing the other of said first and second tuning circuits (TUN1, TUN2) to produce a broadcast signal indicative of said broadcast wave detected by one of said first and second tuning circuits in response to the judgment of said judging means (col 4, line 50 – col 5, line 18).

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Mogi (US 5,303,400) in view of Sakai et al (US 4,654,884).

Regarding claim 5, Mogi discloses the broadcast wave receiving apparatus as set forth in claim 1, wherein Mogi does not disclose the broadcast wave receiving apparatus is installed in an automotive vehicle. Sakai et al disclose the broadcast wave receiving apparatus is installed in an automotive vehicle (col 3, lines 28-56; col 9, line 48- col 10, line 2). It would have been obvious to one of ordinary skill in the art at the time the invention was made to place the broadcast receiving apparatus in an automobile in order to allow the user to receive good reception signals without

intermodulation interference even while traveling on the road as suggested by Sakai et al.

***Allowable Subject Matter***

5. Claims 2-4 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Regarding claim 2, Mogi discloses the broadcast wave receiving apparatus as set forth in claim 1, wherein Mogi and the cited prior art fail to disclose in which said first and second tuning circuits each includes electric field intensity detecting means for detecting said electric field intensity of said broadcast wave at said specific frequency, which further comprises electric field intensity judging means for judging whether or not said electric field intensity of said broadcast wave detected at said specific frequency by said electric field intensity detecting means of one of said first and second tuning circuits is smaller than a predetermined threshold level, and in which said second controlling means is adapted to control the other of said first and second tuning circuits to ensure that said resonance frequency of the other of said first and second tuning circuits is tuned to said specific frequency before allowing the other of said first and second tuning circuits to produce a broadcast signal indicative of said broadcast wave detected by one of said first and second tuning circuits under the condition that the judgment is made that said electric field intensity of said broadcast wave which is oscillated at said specific frequency is larger than said predetermined threshold level.

Regarding claim 3, Mogi discloses the broadcast wave receiving apparatus as set forth in claim 1, wherein Mogi and the cited prior art fail to disclose in which said first and second tuning circuits each includes multi-path detecting means for detecting a multi-path noise at said specific frequency, which further comprises multi-path judging means for judging whether or not said multi-path noise detected at said specific frequency by said multi-path detecting means of one of said first and second tuning circuits is smaller than a predetermined threshold level, and in which said second controlling means is adapted to control the other of said first and second tuning circuits to ensure that said resonance frequency of the other of said first and second tuning circuits is tuned to said specific frequency before allowing the other of said first and second tuning circuits to produce a broadcast signal indicative of said broadcast wave detected by one of said first and second tuning circuits under the condition that the judgment is made that said multi-path noise detected at said specific frequency by said multi-path detecting means of one of said first and second tuning circuits is smaller than said predetermined threshold level.

Regarding claim 4, Mogi discloses the broadcast wave receiving apparatus as set forth in claim 1, wherein Mogi and the cited prior art fail to disclose in which said first and second tuning circuits each includes mutual interference detecting means for detecting mutual interference noise at said specific frequency, which further comprises mutual interference judging means for judging whether or not said mutual interference noise detected at said specific frequency by said mutual interference detecting means of one of said first and second tuning circuits is smaller than a predetermined threshold

level, and in which said second controlling means is adapted to control the other of said first and second tuning circuits to ensure that said resonance frequency of the other of said first and second tuning circuits is tuned to said specific frequency before allowing the other of said first and second tuning circuits to produce a broadcast signal indicative of said broadcast wave detected by one of said first and second tuning circuits under the condition that the judgment is made that said mutual interference noise detected at said specific frequency by said mutual interference detecting means of one of said first and second tuning circuits is smaller than said predetermined threshold level.

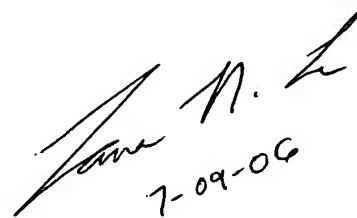
### ***Conclusion***

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lana N. Le whose telephone number is (571) 272-7891. The examiner can normally be reached on M-F 9:30-18:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward F. Urban can be reached on (571) 272-7899. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Lana Le



7-09-06

LANA LE  
PRIMARY EXAMINER